AMENDMENTS TO THE CLAIMS:

The following listing of claims replaces all prior listings, and all prior versions, of claims in the application.

LISTING OF CLAIMS:

1. (Original) An adhesive film for semiconductor, which is adapted for use in a process comprising bonding the adhesive film to a backside of a lead frame to protect the backside and then peeling off the adhesive film after bonding a semiconductor element to the lead frame and sealing them, and which comprises a support film and a resin layer coating one or each side of the support film, the support film having a linear thermal expansion coefficient of at most 3.0×10^{-5}/°C at 20 to 200°C.

2. (Original) An adhesive film for semiconductor, which is adapted for use in a process comprising bonding the adhesive film to a backside of a lead frame to protect the backside and then peeling off the adhesive film after bonding a semiconductor element to the lead frame and sealing them, and which comprises a support film and a resin layer coating one or each side of the support film, the support film having a thermal shrinkage ratio of at most 0.15% when heated to 200°C for 2 hours.

3. (Original) An adhesive film for semiconductor, which is adapted for use in a process comprising bonding the adhesive film to a backside of a lead frame to protect the backside and then peeling off the adhesive film after bonding a semiconductor element to the lead frame and sealing them, and which comprises a support film and a resin layer coating one or each side of the support film and has a ratio of a thickness (A) of the resin layer to a thickness (B) of the support film, (A/B), of at most 0.5.

4. (Original) The adhesive film for semiconductor of claim 1, wherein the support film has a thermal shrinkage ratio of at most 0.15% when heated to 200°C for 2 hours.

5. (Original) The adhesive film for semiconductor of claim 3, wherein the support film has a linear thermal expansion coefficient of at most $3.0 \times 10^{-5}/°C$ at 20 to 200°C.

6. (Original) The adhesive film for semiconductor of claim 3, wherein the support film has a thermal shrinkage ratio of at most 0.15% when heated to 200°C for 2 hours.

7. (Original) The adhesive film for semiconductor of claim 1, wherein the support film has a thickness of 5 to 50 μm.

8. (Original) The adhesive film for semiconductor of claim 1, wherein the support film has a glass transition temperature of at least 200°C.

9. (Original) The adhesive film for semiconductor of claim 1, wherein the support film is made of a material selected from the group consisting of aromatic polyimide, aromatic polyamide, aromatic polyamideimide, aromatic polysulfone, aromatic polyether sulfone, polyphenylene sulfide, aromatic polyether ketone, polyallylate, aromatic polyether ether ketone and polyethylene naphthalate.

10. (Original) The adhesive film for semiconductor of claim 1, wherein the

lead frame is made of a material selected from the group consisting of copper, aluminum, stainless steel and nickel.

11. (Original) The adhesive film for semiconductor of claim 1, wherein the support film has a surface treated.

12. (Original) The adhesive film for semiconductor of claim 11, wherein the surface treatment is selected from the group consisting of chemical treatment, sand mat treatment, plasma treatment and corona treatment.

13. (Original) The adhesive film for semiconductor of claim 11, wherein the surface treatment is alkali treatment or silane coupling treatment.

14. (Original) The adhesive film for semiconductor of claim 1, which, after being bonded to a lead frame, has at 25°C a 90° -peel strength of at least 5 N/m between the resin layer and the lead frame; and, after a lead frame is bonded to the adhesive film for semiconductor and sealed with a sealing material, has at least at one point of temperatures ranging from 0 to 250°C a 90° -peel strength of at most 1000 N/m between the resin layer and each of the lead frame and the sealing material.

15. (Original) The adhesive film for semiconductor of claim 2, wherein the support film has a thickness of 5 to 50 μm.

16. (Original) The adhesive film for semiconductor of claim 2, wherein the support film has a glass transition temperature of at least 200°C.

17. (Original) The adhesive film for semiconductor of claim 2, wherein the support film is made of a material selected from the group consisting of aromatic polyimide, aromatic polyamide, aromatic polyamideimide, aromatic polysulfone, aromatic polyether sulfone, polyphenylene sulfide, aromatic polyether ketone, polyallylate, aromatic polyether ether ketone and polyethylene naphthalate.

18. (Original) The adhesive film for semiconductor of claim 2, wherein the lead frame is made of a material selected from the group consisting of copper, aluminum, stainless steel and nickel.

19. (Original) The adhesive film for semiconductor of claim 2, wherein the support film has a surface treated.

20. (Original) The adhesive film for semiconductor of claim 19, wherein the surface treatment is selected from the group consisting of chemical treatment, sand mat treatment, plasma treatment and corona treatment.

21. (Original) The adhesive film for semiconductor of claim 19, wherein the surface treatment is alkali treatment or silane coupling treatment.

22. (Original) The adhesive film for semiconductor of claim 2, which, after being bonded to a lead frame, has at 25°C a 90° -peel strength of at least 5 N/m between the resin layer and the lead frame; and, after a lead frame is bonded to the adhesive film for semiconductor and sealed with a sealing material, has at least at one

point of temperatures ranging from 0 to 250°C a 90° -peel strength of at most 1000 N/m between the resin layer and each of the lead frame and the sealing material.

23. (Original) The adhesive film for semiconductor of claim 3, wherein the support film has a thickness of 5 to 50 μm.

24. (Original) The adhesive film for semiconductor of claim 3, wherein the support film has a glass transition temperature of at least 200°C.

25. (Original) The adhesive film for semiconductor of claim 3, wherein the support film is made of a material selected from the group consisting of aromatic polyimide, aromatic polyamide, aromatic polyamideimide, aromatic polysulfone, aromatic polyether sulfone, polyphenylene sulfide, aromatic polyether ketone, polyallylate, aromatic polyether ether ketone and polyethylene naphthalate.

26. (Original) The adhesive film for semiconductor of claim 3, wherein the lead frame is made of a material selected from the group consisting of copper, aluminum, stainless steel and nickel.

27. (Original) The adhesive film for semiconductor of claim 3, wherein the support film has a surface treated.

28. (Original) The adhesive film for semiconductor of claim 27, wherein the surface treatment is selected from the group consisting of chemical treatment, sand mat treatment, plasma treatment and corona treatment.

29. (Original) The adhesive film for semiconductor of claim 27, wherein the surface treatment is alkali treatment or silane coupling treatment.

30. (Original) The adhesive film for semiconductor of claim 3, which, after being bonded to a lead frame, has at 25°C a 90° -peel strength of at least 5 N/m between the resin layer and the lead frame; and, after a lead frame is bonded to the adhesive film for semiconductor and sealed with a sealing material, has at least at one point of temperatures ranging from 0 to 250°C a 90° -peel strength of at most 1000 N/m between the resin layer and each of the lead frame and the sealing material.

31. (New) An adhesive film for semiconductor, which is for use in a process comprising bonding the adhesive film to a backside of a lead frame to protect the backside and then peeling off the adhesive film after bonding a semiconductor element to the lead frame and sealing them, and which comprises a support film and a resin layer A coating one or each side of the support film, the adhesive film having at least one of following characteristics (1), (2) and (3):

(1) the support film has a linear thermal expansion coefficient of at most 3.0×10^{-5}/°C at 20 to 200°C;

(2) the support film ha a thermal shrinkage ratio of at most 0.15% when heated to 200°C for 2 hours; and

(3) the adhesive film has a ratio of a thickness (A) of the resin layer A to a thickness (B) of the support film, (A/B), of at most 0.5.